

The Rejections

In the Office Action the Examiner has rejected claims 1-5, 8 and 12-16 under 35 USC 102 (b) as being anticipated by Patitsas, U.S. Patent No. 4,607,675, reference of record. It is the Examiner's contention that the reference discloses a lubricant that is usable at the interface between a run-flat tire is inner-surface and its run-flat device, the lubricant comprising a carrier fluid, a thickener and a surfactant. The Examiner further contends that the amounts disclosed in the reference are the same as set forth in claims 4, 8, and 15.

Next, claims 1-9 and 11 stand rejected under 35 USC 102 (b) as being anticipated by Comper, British Patent No. 2,088,898. It is the Examiner's contention that the composition of Comper can be used in a run-flat tire system.

Next, claims 1-8 and 11-19 stand rejected under 35 USC 103 (a) as being unpatentable over the admitted prior art and further in view of Comper. It is the Examiner's contention that while the admitted prior art teaches that there are lubricants for run-flat tires, Comper discloses a lubricant which one of ordinary skill in the art would find obvious to use in a run-flat tire.

Next, claims 9, 10 and 20-22 stand rejected under 35 USC 103 (a) as being unpatentable over the admitted stated prior art and Comper and further in view of Lentsch. Lentsch is cited for listing of prior art surfactants.

Next, claims 9, 10, 20 and 21 stand rejected under 35 USC 103 (a) as being unpatentable under Patitsas in view of Lentsch for the reasons set forth hereinabove.

THE REFERENCES

The Patitsas reference teaches a composition comprised of a fatty acid, a polytetrafluoroethylene fluorocarbon resin powder, a pyrogenic amorphous silica powder and a carrier. Patitsas teaches that this lubricant is for use with a tire and wheel assembly in a run flat device. The reference further teaches requisite amounts of the components. The reference, also, teaches carriers which are similar to those disclosed and claimed herein as well as the use of a non-ionic surfactant in conjunction with the resin powder.

The Comper reference teaches an aqueous emulsion lubricant comprised of a bentonite clay, a polydimethylsiloxane and a glycol which is used as mold lubricant in tire manufacturing.

The Lentsch reference is a listing of surfactants which can be used in alkaline detergent compositions.

ARGUMENT

It is respectfully submitted that the rejections are in error and should be withdrawn.

At the outset, it is to be noted that the present invention is directed to a lubricant for a run-flat tire as well as a tire having such a lubricant deposited therewithin.

As disclosed the present lubricant provides a major advance in the art by its temporary shear thinning and its return to substantially its starting viscosity after contact between the inner surface of the outer tire and the support ring of a run-flat

tire. The lubricant hereof is shear dependent- not temperature dependent. This feature of the present invention distinguishes it from the art being applied herein. In this regard the claims hereof have been amended to reflect, more clearly, this aspect of the invention and to differentiate the present invention from the prior art. Moreover, the claims have been amended to state that the composition "consists essentially of" the defined components. Thus, it is believed that these amendments to the claims renders the invention distinct from the art being applied herein for the reasons set forth hereinafter.

The Patitsas reference requires, as essential components, a fatty acid and a polytetrafluoroethylene (Teflon) resin. While a fatty acid may function as a wax, most certainly, the present composition is devoid of any suggestion of the use of a Teflon resin as an essential lubricant component, and, the use of Teflon, necessarily, requires a surfactant to wet the resin powder. Furthermore, the reference clearly teaches that the lubricant thereof is sufficiently viscous to be solid or non-flowable below 70° C by gravity force its own weight on an inclined surface and flowable slowly at a temperature higher than 90° C, without the application of shear. The reference is total silent as to the lubricant undergoing temporary thinning upon the application of shear force and recapturing substantially its starting viscosity upon the removal of shear force, while acknowledging that the lubricant can be made to flow at temperatures less than 70° C, by application of shear force. Thus, quite clearly the viscosity of this reference lubricant is temperature dependent not shear dependent.

The Comper reference teaches a lubricant for use in curing a tire bladder during molding. The reference further teaches using an aqueous silicone fluid in the lubricant emulsion. As is known to one of ordinary skill in the art to which the present invention pertains the silicone fluid disclosed in Comper cannot be used in a run-flat system. Its viscosity is too high. The silicone fluid is a Newtonian fluid and its viscosity will not decrease in a shear zone, i.e. it does not have a shear dependent viscosity. Furthermore, the Comper reference teaches an aqueous emulsion. Again, one of ordinary skill knows that a water-based emulsion cannot be used within a run-flat tire. Contrariwise, the present lubricant when sheared, forms a liquid and, then, returns to its substantially starting physical state upon removal of shear forces.

Finally, the Lentsch reference, as noted, is nothing more than a catalog of surfactants for use in an alkaline detergent composition. There is absolutely no teaching, disclosure or suggestion contained within the reference as to the applicability of any surfactant disclosed therewithin to a lubricant for use on a run flat tire system.

1. The rejections under 35 USC 102 are in error.

Turning first to the rejection of the claims under 35 USC 102 (b), it is axiomatic within the law that in order for there to be an anticipation it is incumbent that each and every element of the invention, as claimed, be shown by the alleged anticipating reference.

a. Patitsas is not anticipatory.

By virtue of the amendment to the claims, when contrasted with the teachings of the reference, as discussed hereinabove, it is apparent that there can be no appropriate anticipation rejection of claim 1. Patitsas simply does not teach each and every element of the invention as claimed. Patitsas includes therewithin components which are not contemplated by the present invention and excluded hereby. Furthermore, as shown hereinabove, the lubricant thereof is technologically distinct herefrom since it is temperature dependent, not shear dependent and the amended claims now reflect this feature of the lubricant. Since Patitsas fails to teach a composition that has the ability to return to substantially its starting viscosity, nor would such be inherent therewithin, because of its temperature dependency, it is contended that no anticipation is appropriate with respect thereto.

As to claims 2-5 and 8 they depend from claim 1 and include all the limitations thereof. Since Patitsas does not anticipate claim 1, it does not anticipate these claims.

With respect to the alleged anticipation of claims 12-16, the same arguments as to claims 1, 2 through 5 and 8 apply equally.

Accordingly, it is respectfully requested that this rejection be withdrawn.

b. Comper is not Anticipatory

With respect to the rejection under 36 USC 102 (b) by Comper, it is submitted that the rejection is inappropriate. Again, Comper teaches an aqueous emulsion for

a mold and has absolutely no applicability to a lubricant for a run-flat tire, per se. Simply stated the composition thereof cannot and will not work in a run-flat tire environment. The reference simply does not teach the limitations incorporated into the claims where the lubricant has an initial viscosity of above 100, 000 centipoises at 25° C and 1-20 RPM. Thus, it is clear that the rejection of claims 1-9 and 11 under 35 USC 102 (b) in view of Comper is in error and withdrawal thereof is respectfully requested.

2. The Rejections under 35 USC 103 are in error.

With respect to the rejection of claims 1-8 and 11-19 under 35 USC 103 (a), in view of the admitted prior art and Comper, Applicant submits that the Examiner is in error. It is submitted that Comper does not provide the deficiencies to the prior art that would be prerequisite to negate the patentability of these claims. First, Comper is no manner suggestive of a lubricant for a run-flat tire system or that such a composition can be deposited, in a thickened state, onto the support ring of the tire. Indeed, Comper is a water-based emulsion and simply cannot be used as a run-flat lubricant. According to Comper's own teachings, after nine (9) uses a new lubricant coating must be applied to the mold. One must readily appreciate that such could not be countenanced in a run-flat tire environment. Compers own statements within the patent admit to the non-applicability thereof.

With respect to the rejection of claims 9, 10 and 20-22 under 35 USC 103 (b) as being unpatentable over the admitted prior art and Comper and further in view of Lentsch it is submitted that the Lentsch reference does not provide the

deficiencies to the primary references that would be prerequisite to negate patentability herein. Lentsch is nothing more than a listing of possible surfactants for use in an alkaline detergent. One of ordinary skill in the art to which the present invention pertains would not, under any circumstances, look to the alkaline detergent art for a surfactant that would be usable in a lubricant composition for a run flat tire.

Even if the reference was properly cited, it would take undue experimentation to select from the entire listing thereof to find an appropriate silicone surfactant, as opposed to any other nonionic, amphoteric, anionic, etc. surfactant listed in the reference. Such an exercise is well beyond the bounds of that which could be expected of one of ordinary skill. Thus, it is submitted that the rejection is in error and should be withdrawn.

With respect to the rejection of claims 9, 10, 20 and 21 under 35 USC 103(a) over Patitsas further in view of Lentsch, the same arguments urged above apply equally herein. There simply is no suggestion in the art to select a surfactant useful for manufacturing an alkaline detergent and deduce therefrom that it would be useful in a lubricant composition for a run-flat tire. In this regard it is contended that the Examiner is utilizing the present disclosure in a manner which is prohibited i.e. reconstructive hindsight. Therefore, it is submitted that it has been demonstrated that the rejection is in error and should be withdrawn.

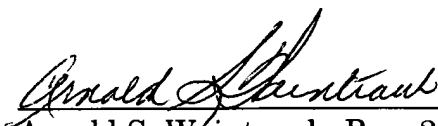
CONCLUSION

It is respectfully submitted that by this amendment all bases of rejection set forth in the Office Action have been traversed and overcome. The claims have been amended to more succinctly define the invention and to render them patentably distinct from the art of record. It has been shown that the prior art being applied herein simply neither anticipates nor renders obvious the present invention as set forth in the now amended claims.

Therefore, it is submitted that in the absence of a more pertinent art, that the application has now been placed in condition for allowance and notice to this effect is, thus, respectfully requested.

If the Examiner believes that the prosecution of this application can be expedited then he is courteously requested to place a phone call to applicant's attorney at the number listed below.

Respectfully submitted,


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